USER MANUAL

Compact Ventilation Unit Tion O2
Breezer

TION.

USER MANUAL

Compact Ventilation Unit Tion O2 Breezer

ЕАС

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Dear Customer!

Thank you for your purchase of the Tion O2 Breezer compact ventilation unit.

1. GENERAL

The Compact Ventilation Unit Tion O2 Breezer (the «device» in what follows) is designed for active supply of considerable volumes of outside air into the building. This involves the following:

- fresh air is continuously supplied by a silent fan from outside in a controlled flow;
- a filter set cleans the air of the main contaminants;
- when necessary, the intake air can be heated to a preset temperature (except for Tion O2 Lite version);
- the device is compatible with the MagicAir system (section 5.4; this applies to the Tion O2 MAC and Tion O2 MAC Base configurations; other versions can be optionally upgraded with this compatibility feature).

Technical and user-defined parameters may vary depending on the particular set purchased, installation and operating environment, and filter configuration and condition.

The Manufacturer reserves the right to introduce necessary changes into the device or into the design of its separate parts, without detracting from the performance of the equipment.

Before using the device please read the operation manual and the warranty conditions carefully, make sure that the warranty certificate has been filled out correctly, and check the completeness and the appearance of the device.

PLEASE NOTE!
• The device is not intended to be used for heating premises.
• The device is not designed as a medical device.

Developed by:

«Tion Smart Microclimate» JSC, Russia, 630090, Novosibirsk, Inzhenernaya 20. Assembled in China.

For more details about the product, manufacturer, sales and service center adress and contact information please visit: tion.global

Sales office: Novosibirsk, Inzhenernaya St., 20, 630090, Tel.: +7 (383) 383-00-64.

2. PACKING LIST

Package option	Tion O2 MAC	Tion O2 Standard	Tion O2 MAC Base	Tion O2 Base	Tion O2 Lite
Device	●	●	●	●	●
F7 base filter	●	●	●	●	●
High-efficiency E11 (H11) filter	●	●	–	–	–
Adsorption catalytic filter AK	●	●	–	–	–
Heater	●	●	●	●	–
Remote control	●	●	●	●	●
AAA batteries, 2 pcs.	●	●	●	●	●
Interface Unit (compatibility with MagicAir)	●	–	●	–	–
User Manual	●	●	●	●	●
Mounting template	●	●	●	●	●
Anchor bolt, 2 pcs.	●	●	●	●	●
Warranty card	●	●	●	●	●
Shipping package	●	●	●	●	●

The version of the device is indicated in the warranty card and in the certificate of purchase, included in this Manual.

In the Tion O2 MAC and Tion O2 Standard versions (configuration sets), the devices clean the air from all types of contaminants, heat it if necessary and supply it into the room. They are recommended for use in all regions, especially in locations with unfavorable environmental settings.

The Tion O2 Lite version is recommended for use in regions with warm climate (see outdoor temperature applicability chart in section 4, Table of Technical Parameters). Tion O2 Lite, Tion O2 Base and Tion O2 MAC Base versions are recommended for use in environmentally clean regions. To ensure enhanced air cleaning, Tion O2 Lite, Tion O2 Base, Tion O2 MAC Base devices should be outfitted with the appropriate additional filters.

The Tion O2 MAC and Tion O2 MAC Base versions include an interface module for connection to the MagicAir smart microclimate control system (section 5.4). All other versions can be updated to install such an interface unit at any authorized service center of the Manufacturer.

The Tion O2 Lite version can be upgraded to Tion O2 Base upon the user's request.

Please contact any authorized service center of the Manufacturer to install the optional heater system (at additional cost).

The user can upgrade the Tion O2 Base version to Tion O2 Standard without specialist assistance, by installing additional filters. The Tion O2 MAC Base version can be similarly upgraded to Tion O2 MAC with additional filters.

The filters are available from the official Tion online store tion.global or from authorized dealers.

3. SAFETY REQUIREMENTS

1. The device should be installed in a location that ensures free and safe access.
2. Do not use in premises with temperature below 5°C or above 40°C.
3. Do not use in premises with relative humidity above 80% at 20°C.
4. Avoid direct sunlight.
5. During a lightning storm, turn the device off and unplug it from the mains supply.
6. The device should be unplugged from the power supply system prior to maintenance or scheduled servicing.
7. The user is not authorized to perform any repairs or alterations to the device design.
8. No foreign objects or water should be allowed to get into the device.
9. The device must not be used if the power supply cord insulation or any part of the housing is damaged.
10. If any damage or possible signs of abnormal operation are detected, pull the plug out of the power socket and contact an authorized service center for advice on further operation of the device.

4. TECHNICAL PARAMETERS

Package option	Tion O2 MAC	Tion O2 Standard	Tion O2 MAC Base	Tion O2 Base	Tion O2 Lite
Power consumption (min/max), W	18/1450	18/1450	18/1450	18/1450	18/30
Permissible outdoor temperature range, °C	-40...+50	-40...+50	-40...+50	-40...+50	0^*...+50
Noise level, dBA	32/39/ 45/52	32/39/ 45/52	32/39/ 45/52	32/39/ 45/52	32/39/ 45/52
Air flow rate**, m3/ hr	35/60/ 75/120	35/60/ 75/120	40/65/ 85/120	40/65/ 85/120	40/65/ 85/120

Package option	Tion O2 MAC	Tion O2 Standard	Tion O2 MAC Base	Tion O2 Base	Tion O2 Lite
Power supply	~220 V, 50 Hz	~220 V, 50 Hz	~220 V, 50 Hz	~220 V, 50 Hz	~220 V, 50 Hz
Net weight, kg	8.0	8.0	7.4	7.4	6.8
Overall dimensions (H x W x D), mm	514 x 454 x 163	514 x 454 x 163	514 x 454 x 163	514 x 454 x 163	514 x 454 x 163
Assigned lifetime, years	5	5	5	5	5
Guarantee period, years	1	1	1	1	1
Compatibility with MagicAir	Yes	No	Yes	No	No

∗ Use of the Tion O2 Lite version at negative outside air temperatures may reduce its service life.
∗∗ Device performance depends on the operating conditions.

5. SCHEMATIC DIAGRAM AND OPERATING PRINCIPLE

5.1. Construction

A schematic diagram of the device with maintenance panel removed (Tion O2 Standard version) is shown in Fig.1.
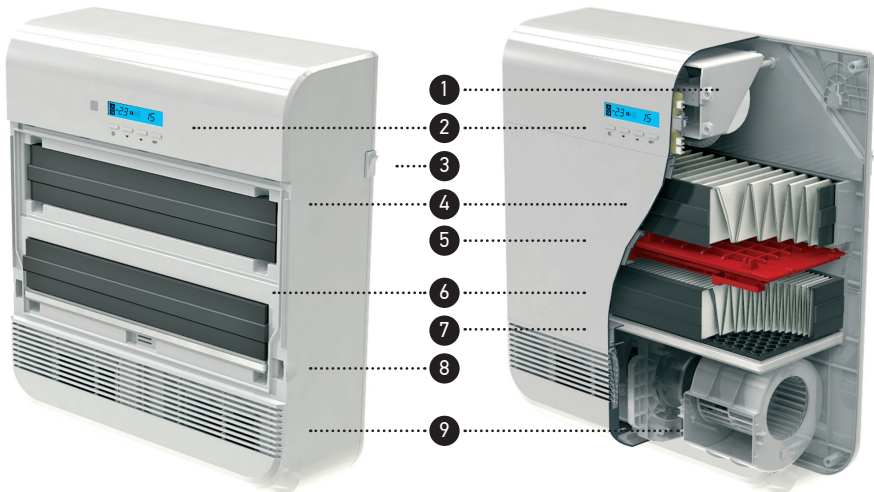

Figure 1. Device layout

1. Air duct flap
2. Control buttons and LCD display
3. Power switch
4. Base filter F7 (retainer of coarse dust F7)
5. Heater
6. High-efficiency HEPA E11 (H11) filter (retaining fine dust)
7. Adsorption catalytic filter AK (absorber of noxious gases)
8. Maintenance panel latches
9. The device must not be used if the power supply cord insulation or any part of the housing is damaged.
10. If any damage or possible signs of abnormal operation are detected, pull the plug out of the power socket and contact an authorized service center for advice on further operation of the device.

PLEASE NOTE! The device is equipped with an electromechanically driven air duct flap ("the flap" in what follows). It opens the air inlet duct when the device is turned on. After turning the device off the flap closes the channel to prevent cold air from penetrating into the room. The flap takes 7-10 s to open/close. If the flap is not fully closed because of an unexpected failure, a double warning beep is issued.

5.2 Operating principle

Oxygen-rich air from outside is drawn into the air intake pipe of the device. The air intake section prevents rainwater from penetrating into the housing. The air is then fed into the device through the flap via a heat insulated channel. If the device is turned off, the flap closes the channel for outside air into the device. The air cleaning is performed inside the casing. The schematic of the operation is shown in Fig.2.
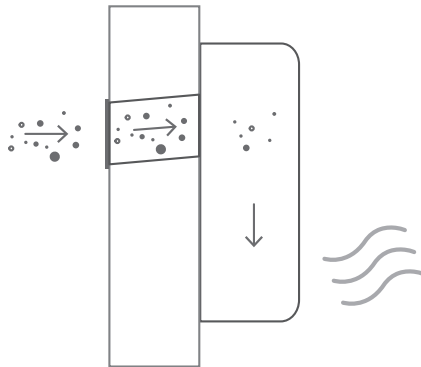

Figure 2. Device operating principle

The F7 base filter traps coarse and medium size dust particles, lint, soot and allergens with efficiency up to 90%. It extends the service life of the high-efficiency HEPA filter E11(H11).

If necessary, the intake air can be heated to the required temperature.

The high-efficiency HEPA filter E11 (H11) entraps the finest particles of dust, allergens, bacteria, viruses and mold spores with efficiency above 95%. The E11 filtration grade is the air cleaning standard for medical facilities. Only E11 grade filters can entrap hazardous microorganisms (lower class filters cannot stop them).

The adsorption catalytic filter AK deep-cleans the air, removing the major components of exhaust fumes, industrial emissions, odors and smoke.

The cleaned air at comfortable temperature is fed into the room by a fan.

The high-efficiency E11 (H11) HEPA filter can be replaced with an absorption catalytic AK-XXL filter with enhanced performance. After the AK-XXL filter is installed the device will clean the air from harmful substances in concentrations even as high as 10 times above maximal permissible levels. Strong unpleasant odors are removed as well. The dust filtration performance remains at 80-90% level.

5.3. Control and Indication

The user interface of the device consists of the following elements:
• Liquid crystal display (LCD display),
• Control panel buttons,
• Remote control (RC),
• Sound warnings.

These elements help control the parameters of the device and adjust its settings as required.

If the device is coupled with a MagicAir system (section 5.4), the device is then controlled automatically.   Switching between automatic and manual control can be done in one of the following ways:

- double-pressing any button on the control panel or remote control,

- pressing and holding any button on the control panel.

5.3.1 LCD display

All relevant information with current device settings is indicated on the LCD display. The LCD backlighting turns on immediately after any button is pressed on the control panel or remote control (with the exception of when the device is turned off using the button ⏻) and automatically turns off after 10 s. If the device is under automated control of the MagicAir system, the backlighting is disabled.

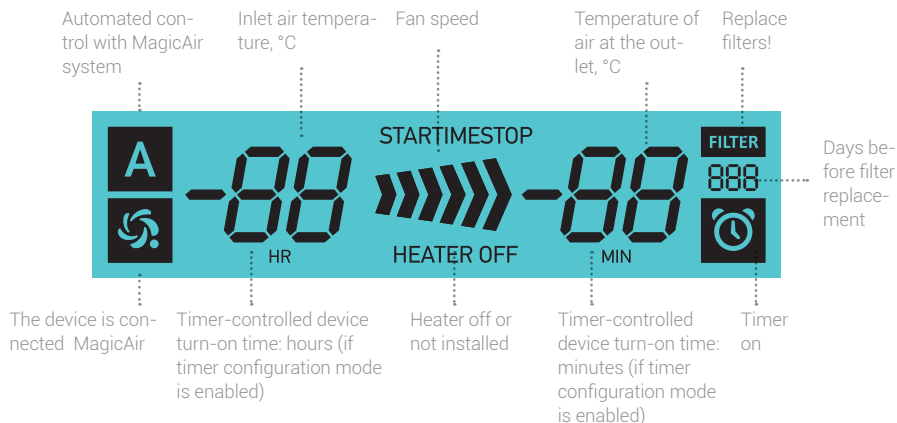LCD messages are explained below

Automated control with MagicAir system

Inlet air temperature, °C

Fan speed

Temperature of air at the outlet, °C

Replace filters!

Days before filter replacement

The device is connected MagicAir

Timer-controlled device turn-on time: hours (if timer configuration mode is enabled)

Heater off or not installed

Timer-controlled device turn-on time: minutes (if timer configuration mode is enabled)

Timer on

Figure 3. LCD display elements

Figure 4. LCD display, when the device is under automated control of MagicAir system (section 5.4):

PLEASE NOTE! The inlet and outlet air temperature measurement has a tolerance range of ±3°C. The device is not intended for maintenance of constant temperature in the room.

Figure 5. LCD display when the device is connected to MagicAir system (section 5.4), but remains under manual control

Figure 6. LCD display when the device is under manual control and filter replacement schedule is drawing near Error: Reference source not found

Figure 7. LCD display when the device is under automated control of MagicAir system (section 5.4), heater is off or not installed in this configuration
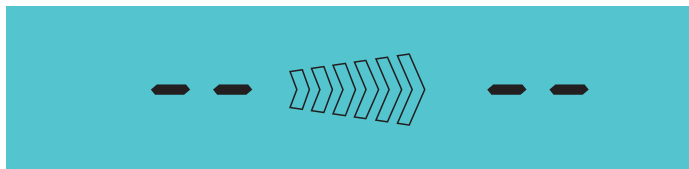

Figure 8. LCD display in standby mode (section 5.3.4)

5.3.2 Control Panel Buttons

The command buttons are located on the control panel (Fig. 9). They are used for controlling the device, switching between standby/operating modes and establishing communication with the MagicAir base station.

«Power». Switching between standby and active mode

«SET». Selection of parameters to be adjusted

«[-]». Decrease value or deactivate

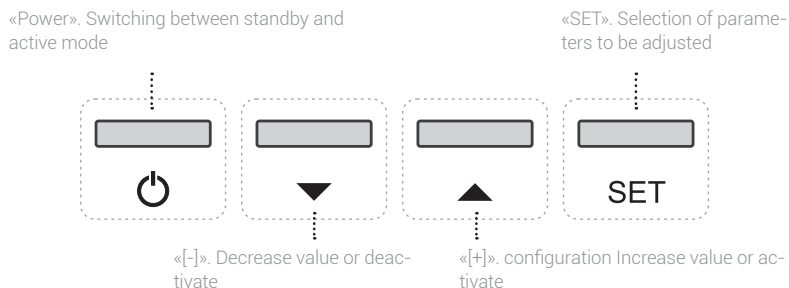«[+]». configuration Increase value or activate

Figure 9. Control Panel Buttons

5.3.3 Remote control (RC)

The remote control unit (Fig. 10) is used for manual remote control of the device:
- switching the device between standby and active mode (section 5.3.5),
- adjusting air flow (section 5.3.6),
- adjusting target temperature (section 5.3.8),
- adjusting current time (section 5.3.10),
- configuring timer settings for turning the device on/off (section 5.3.11),
- adjusting minimal admissible air temperature (section 5.3.12),
- adjusting filter replacement alert schedule (section 5.3.13).

«[+]». Increase value or activate

«SET». Selection of parameters

«Power». Switching between standby and active mode
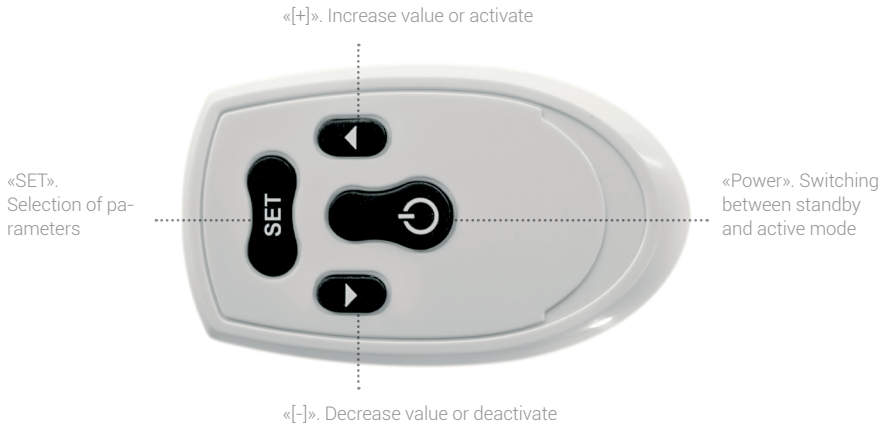
«[-]». Decrease value or deactivate

Figure 10. Remote control buttons

Before first startup of the device, and if RC is not functioning, install new batteries as follows:
1. Open battery compartment lid;
2. Insert two AAA 1.5 V batteries (included), making sure to observe polarity;
3. Reinstall compartment lid, pushing it until it clicks.

PLEASE NOTE! The batteries supplied with the device may have shorter lifespan.

5.3.4 Confirmation sound signals

Sound signals indicate certain functions performed by the device. The meaning of these sound notifications is given in the table below. If desired, sound notifications can

be switched off completely: press simultaneously and hold for 2 s the buttons [SET], [-] and [+] on the control panel (not available for RC operation).

Sound signals are inactive when the device is in automatic mode (section 5.4).

Type	Value
1 signal	«Command recognized», «Function enabled»
2 signals	«Function disabled»
4 signals	«Filter lifetime timer renewed»

5.3.5 Standby mode

When the device is turned off using the RC, the key ⏻ on the control panel or via the MagicAir system, it enters the Standby mode (Fig. 11, 12). In the standby mode the device does not perform its operating functions (the flap is closed, the fan is off), but the power is still connected and the control circuitry is enabled. The standby mode indication is displayed on the LCD screen as flashing dashes (marked as dashed lines in the Figures below):
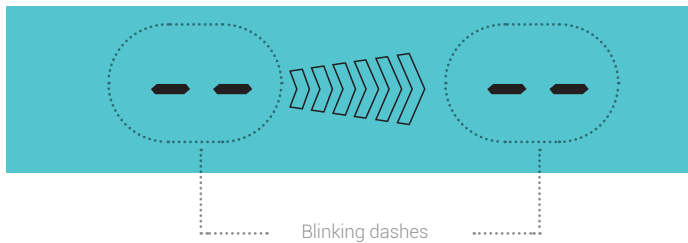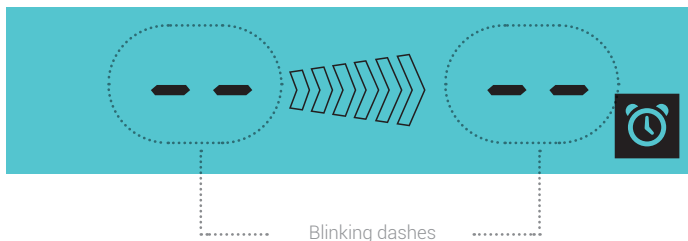

Figure 11. Standby Mode Indication

Figure 12. Standby mode as indicated on the LCD display, if timer is on

Switching between Standby and active modes is performed by one of the following actions:
• pressing the ⏻ button on the device control panel,

- pressing the ⏻ button on the remote control;
- timer-driven switching on/off,
- automatic switching on/off with the MagicAir system (section 5.4).

Device activation (switching from standby to active mode) is accompanied by a single beep, device deactivation by a double beep (in manual control mode, if sound signals are enabled). All user configured values are retained upon switching between modes.

If the device was in active mode before being disengaged using the switch button on the device side panel or by disengagement from the power supply, its re-engagement will bring it into standby mode.

5.3.6 Air Flow Settings

Four air flow rate steps are provided. The air flow rate is adjusted manually (using control panel or remote control) or automatically with the MagicAir system (section 5.4).

In manual mode the adjustment is performed with the [-] and [+] buttons on the control panel or remote control.

Pressing the [-] or [+] buttons decreases or increases the air flow, if no other settings are being adjusted at the same time (section 5.3.7).

Air flow indication on LCD is show in Fig. 13.

| first speed | second speed | third speed | «turbo» speed |

Figure 13. Air flow rate indication

The «turbo» mode is used for enhanced, rapid aeration in a room after a longer period of not being used by people.

Under low outside air temperatures, the device may automatically decrease the fan speed to ensure proper air heating and optimal energy consumption. Consequently, there will be less than four available flow rate steps. Should this happen, any attempt to boost the fan speed will result in a double beep, the LCD display will signal the unavailability of this function by means of blinking active elements of air flow indication. All fan speeds will remain available if heater mode is off.

5.3.7 Settings configuration with the [SET], [-] and [+] buttons

The device settings are adjusted manually (using the control panel or remote control) or automatically with the MagicAir system (section 5.4).

To select a system parameter to be changed, press the [SET] button. Switching between the parameters is also achieved by sequential pressing of the [SET] button. When selecting a parameter, its icon on the LCD display will start blinking.

If the parameter value can be set, then one pressing of the [-] or [+] button changes the value by one unit of measurement. To change the parameter value by several units, press and hold the [-] or [+] button for more than 1 s until you reach the desired value.

No.	Adjusted parameter	Button functions
1	Target air temperature*	[-]: -1°C, [+]: +1°C
	Heater*	[-] and [+] for 2 s: on/off
2	Current time**	[-]: +1 hr, [+]: +1 min
3	Timer on/off***	[+] or [-]: on/off
4	Timer value for device launch***	[-]: +1 hr, [+]: +5 min
5	Timer value for device stop***	[-]: +1 hr, [+]: +5 min
6	Minimal admissible inlet air temperature****	[+]: next value, [-]: previous value
7	Filter Service Interval	[+]: +30 days, [-]: -30 days; [-] and [+] for 2 s: 360 days

A heater is not installed in Tion O2 Lite Lite configuration.
**If MagicAir is connected, the parameter cannot be adjusted.*
***If the device is under control of MagicAir, the parameter cannot be adjusted.*
****Available values of the parameter: -25°C, -30°C, -35°C, -40°C.*

The target temperature and fan speed have limiting values, which cannot be looped: after the maximal value is reached, further pressing of the [+] button will not cyclically bring the parameter back to its minimal value; instead the maximal value will be kept. All other parameters are looped, which means that after their maximal values are reached further pressing of the [+] button will cycle the parameter back to its minimum.

To accept and save the settings and move to another parameter, do one of the following:
• press and hold for 2 s the [SET] button (this action is not available from the RC),
• do not press any other buttons for 10 s.

A single beep will sound, confirming the changes have been saved and updated.

Simultaneously pressing 4 buttons: [SET], [-], [+] and ⏻ (not available from the RC) will reset all user settings to factory defaults. This function is not active when a parameter is being set.

5.3.8 Setting the air heating target temperature

The target temperature* of the outlet air is adjusted in manual mode (using control panel or remote control) or automatically with the MagicAir system (section 5.4).

Target temperature adjustment range: from -20°C to +25°C. The new target temperature is attained in 1-5 minutes.

Factory setting: +20°C.

Press the [SET] button; the target value on the LCD display will start blinking. Using the [-] or [+] buttons select the required target temperature. If the heater is off (section 5.3.9), neither of the buttons [-] or [+] will have any effect.

PLEASE NOTE!
• If the inlet air temperature is above the target value (no heating is needed), the target temperature is not displayed. To review the set temperature, press the [SET] button.
• If the ambient air temperature decreases below its minimum value, specified by the «minimum admissible temperature» parameter (section 5.3.12), the device will automatically shut down. The warning message «EC02» will be displayed (section 7.2), and the flap will close. Should this happen, to restart the device for normal operation it should be unplugged from the power supply and then turned on again a few seconds later.
• If you are using the Tion O2 Lite version, the device should be turned off in the case of condensate or frost formation. It is recommended to resume operation only after its temperature warms up to the room temperature and traces of frosting disappear. To prevent frosting and condensate formation in the future, contact any authorized Service Center of the Manufacturer to upgrade the installation with a heater system (at additional cost).

* A heater is not installed in Tion O2 Lite configuration.

5.3.9 Switching heater off

The heater* can be turned off manually using the control panel.

To turn off the heater, press the [SET] button to go to target temperature adjustment (section 5.3.7). Press simultaneously and hold for 2 s the [+] and [-] buttons (option is unavailable from the RC). The «HEATER OFF» warning will be displayed and a single sound beep will be issued. Instead of target temperature value, blinking «- -» dashes will be displayed, and target temperature adjustment will be disabled. In the operating mode the target temperature is not indicated.

To turn the heater on, repeat the same actions. The target temperature will be shown

on the display instead of «− −» dashes, and a single beep will sound. A single beep is issued.

> PLEASE NOTE!
> • It is not recommended to turn off the heater if the inlet air temperature is below 0°C, as this can cause frosting up of the device, resulting in decreased performance and greater noise.
> • Under increased humidity conditions in the room, for a certain range of outlet air temperatures, condensate may accumulate on the external surfaces of the device. In this case, turn on the heater and, if necessary, increase the target temperature to 10 °C.

A heater is not installed in Tion O2 Lite Lite configuration.

5.3.10 Current Time

Time adjustment can be performed manually (using the control panel or remote control), if MagicAir (section 5.4) is not connected.

The «Current Time» set point is used in the timer function (section 5.3.11)

To adjust the parameter select it with the [SET] button (section 5.3.7).

Press the [-] button to increment the hours value by +1 h and the [+] button to increment the minutes value by +1 min.

If maximal time value is attained (23 h or 59 minutes), then subsequent pressing of the button will cycle the value back to the minimum (00 h or 00 min.)

5.3.11 Timer

The timer is used for turning the device on and off (switching to/from the standby mode) at a predefined moment.

The timer can be configured from the control panel or remote control, only if the device is not under automated MagicAir control. If the device is controlled by MagicAir, all previous timer setting become inactive.

Blinking segment

Figure 14. Timer mode indication

Select the parameter «Timer on/off» with the [SET] button in the manual control mode. Press [+] or [-] buttons to switch between timer enabling/disabling. The timer mode is displayed as «ON» / «OFF» indication (Fig. 14).

After selecting («ON») press [SET] to go to timer adjustment. The LCD display is then in the mode of configuring the timer-based device engagement (see Fig.15, where blinking segments are shown circled).
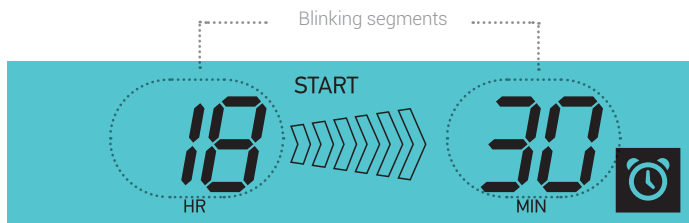

Figure 15. Adjustment of start time for the device

Press the [-] button to increment the hours value by +1 h and the [+] button to increment the minutes value by +5 min.

To adjust the stop time for timer-based operation, press the [SET] button once again; the display is then in the time adjustment mode (Fig. 16; blinking segments are shown circled).
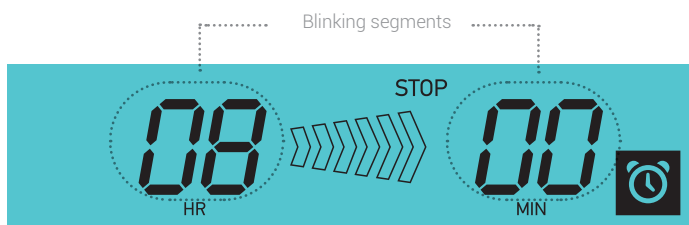

Figure 16. Adjustment of stop time for the device

If the maximal hours value is attained (23 h), then subsequent pressing of the [-] button will cycle the value back to the minimum (00 h).

Upon timer activation, the device will be engaged with the same settings as before going into standby mode.

5.3.12 Minimum Admissible Temperature

This function is used for selecting the minimum ambient temperature, below which the device shuts down.

The minimum admissible temperature is configured in manual mode (with control panel or remote control).

The device will switch to standby mode if the outdoor temperature drops below this configured value and the warning message «EC02» will blink (section 7.2).

Factory setting: -30°C.

To adjust the parameter select it with the [SET] button (section 5.3.7).

Press the [+] or [-] button on the control panel to select the next or previous value from the predefined set.

The parameter can take the following values: -25°C, -30°C, -35°C, -40°C.

5.3.13 Filter replacement alert schedule

The filter replacement alert function helps keep track of proper filter maintenance.

The filter replacement alert message can be set in manual mode (with control panel or remote control).

This function activates the countdown from the user defined value down to zero. The counter counts the time only when the device is on and operating (flap is open and fan is blasting air in).

If the device is in standby mode or switched off using the button on the side panel, the counter stops the countdown.

This parameter is factory preset to its maximal value, 360 days.

To adjust the parameter select it with the [SET] button (section 5.3.7).

Press the [+] or [-] button to increase/decrease this parameter by +/-30 days.

After the counter reaches the value 30 days, a warning message «FILTER» is displayed, indicating the number of days before planned filter replacement.

After the counter reaches zero, the warning message «FILTER» and air flow rate indication will start blinking (Fig. 17, where blinking segments are circled).

The device should then be switched off and the filters replaced, as described in section 7.1.

To reset the counter after filter replacement, go to the configuration mode, then press simultaneously the [+] and [-] buttons on the control panel and hold at least for 2 s (option unavailable from the remote control). The «FILTER» message will disappear from the LCD display.
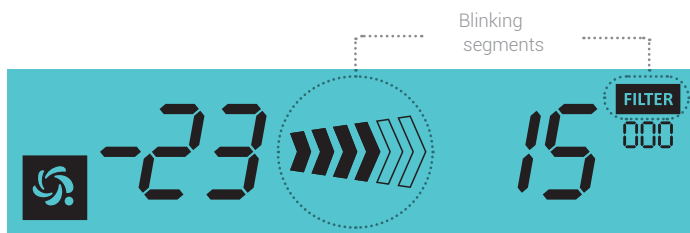
Figure 17. Configuration of filter replacement alert schedule

PLEASE NOTE! Do not reset the counter without replacing filters. Operating the device with used filters can decrease performance, increase fan noise and cause device failure.

5.3.14 Saving settings in memory

All parameters retain the configured values upon switching to and from the standby mode as follows:
- upon pressing the ⏻ button   on the control panel or remote control,
- when the timer is used,
- under automated control by MagicAir,
- at power-off using the switch on the right panel of the device,
- at power outage.

5.3.15 Device shutdown, power off

To switch the device off for a short period, press the ⏻ button on the control panel or remote control. The fan will turn off and the flap will close. If a fault occurs during flap closure (flap remains open), a double beep will sound. In this case turn the device on and then off again. If the problem persists, contact the service center.

PLEASE NOTE! If you plan to turn the device off for a longer period, press first the control ⏻ button on the lower panel or remote control and wait 25 s (till the flap is closed), then turn off the power switch on the right panel and pull the power cord out of the socket. Failure to do so will lead to incomplete closure of the flap, and air from outside will be drawn into the room.

Compact Ventilation Unit

PLEASE NOTE! If the device is left off with closed flap for a prolonged period of time under negative outdoor air temperatures, it is possible that working parameters may deviate from nominal values after it is turned on again, for example with increased noise and decreased performance. To resume operation in these conditions do the following:
• turn on the power switch on the right side panel of the device;
• wait for the device to warm up to room temperature;
• switch on the device using the ⏻ button on the control panel or remote control.

Please note! If a double beep was issued after the power was turned off (signaling that flap is not completely closed), do the following:
• Disconnect the device from mains supply (pull out the power plug) and place the device in a warm location inside the room (a certain distance away from its place of operation);
• wait for device to warm up to room temperature;
• install the device back to the place of operation;
• reconnect the device to the mains supply;
• turn on the power switch on the right side of the device.

5.4 Functioning with MagicAir

5.4.1 About the MagicAir System

The MagicAir base station monitors the CO_2 level in a room using a set of designated sensors. The collected sensor data are sent to a cloud server and can then be retrieved by smartphone. With the free MagicAir mobile application the user can follow and control the compatible devices from the internet, at any time and from anywhere. In accordance with programmed parameters, the MagicAir base station issues commands to the connected climate control units.

By default the Tion O2 MAC and Tion O2 MAC Base Breezers are equipped with an interface module for connection with the MagicAir system. All other Breezer versions can be upgraded with this module at any authorized service center of the Manufacturer.

Functioning of Tion O2 Breezer with the MagicAir system:

Transfer the challenge of maintaining an optimal microclimate to an automated system. The MagicAir base station collects environmental data and autonomously controls the Tion O2 Breezer device.
• Control CO_2 level in living and office spaces with a mobile application.

5.4.2 Connecting the device to the MagicAir system

To use the device with the MagicAir system, first connect the device to it. Only devices with the designated interface unit can be connected to Magic Air.

To connect the device to the MagicAir base station simultaneously press the [+] and [SET] buttons on the device panel and hold for 2 s. The LCD will blink during the connection process. After a successful connect, a single beep will sound. The connection process takes at most 30 s. In the case of a connection failure, a double warning beep is issued.

After a successful connect, the MagicAir logo will be displayed (section 5.3.1). Once the device is connected, the time adjustment is disabled from the panel (time settings are then taken from the MagicAir system).

5.4.3 Control modes

After connection to the MagicAir system you can use either manual or automatic operating mode. The automatic mode can be switched on using the designated mobile application MagicAir and via the web interface on the site magicair.tion.ru, by moving a slider. In the automatic control mode, its icon is indicated on the LCD (section 5.3.1).

In the automatic mode you can control the maximum/minimum fan speed, switch the heater on/off and set the heating temperature.

For manual adjustment of the fan speed, timer, environmental parameters (from control panel or remote control) first disable the automatic control mode. To do so press any button (except ⏻) either on the control panel, or on the remote control. The automatic control mark will disappear from the LCD display.

In the manual control mode you can turn the device on and off, adjust the fan speed, select the air intake mode, switch heater on/off and set up heating temperature

Switching between manual and auto control modes is performed in the MagicAir mobile application using the corresponding slider.

6. GETTING STARTED

6.1 Unpacking and Visual Inspection

Remove the transportation packaging and examine the device carefully to make sure it has no damage caused by improper transportation or storage. If you notice any damage, consult the service center of your Vendor to decide whether it is safe to use the device.

If the temperature of the device housing before installation is below 10 °C (after storage or transportation in cold environment), first keep the device for 2 hours in a warm room inside the packing film to bring its temperature up to room conditions. Failure to do so can cause device failure, damage its plastic parts during installation or lead to condensate formation.

Depending on the factory sealing procedure, the device filters (base F7, HEPA E11 (H11) and adsorption catalytic AK filter) may be supplied in protective plastic packaging. Therefore, before first use, the filters must be unpacked (Fig. 18). Please do the following:

1. Remove maintenance panel:
   • push on the left and the right locks towards each other, releasing the panel bottom corners;
   • pull the panel, overcoming the force of the magnet lock, located at the bottom of the maintenance panel.
2. Take out all filters for the given version from the packaging.
3. Unwrap each filter from the protective plastic film.
4. Install each filter into the device.
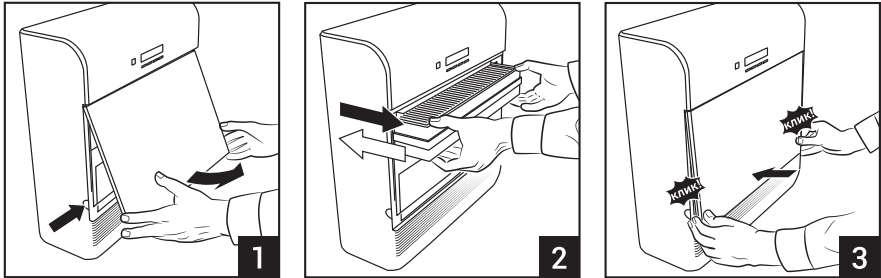5. Reinstall the maintenance panel and make sure that both right and left latches are clamped shut.

Figure 18. Filter preparation workflow

PLEASE NOTE!
• Avoid applying force to the latches during panel reinstallation, as this may damage the device.
• The filters installed in the device may be wrapped in protective plastic bags. Make sure to remove the protective film before starting operation. If the device is turned on with filters still in plastic packaging, this may cause damage and void the warranty obligations. The protective packaging does not impact the quality of filters or their storage life inside the device.
• When new, the device may have the characteristic odor of plastic ware. Such an odor most likely comes from the shipping package. Take out the filters and turn on the device at the 3rd or 4th speed for several hours. If an odor persists, please call the service center.

6.2 Placement guidelines

The device is most useful in rooms where people spend most of their time, i.e. those most affected by breathing: bedrooms, children's rooms, living rooms, etc.

Select the location of the unit taking into account its dimensions (height 514 × width 454 × depth 163 mm) and power cord length (4.5 m). At least 50 mm clearance from the floor, walls and ceiling must be provided. The distance between the window jamb and central point of the opening in the outer wall must be at least 500 mm. The device may be positioned at any height, even below the ceiling, since it can be controlled by a remote control unit. The composition of the wall behind it must allow for a ventilation duct to be drilled. There must be no service lines (electric wiring, heating or water supply pipes, etc.) in the drilling area.

6.3 Installation

1. Make sure that the device will be freely accessible in the planned location and there is enough space in front of the maintenance panel to perform maintenance.
2. Follow the detailed installation guidelines on the mounting template.
3. The factory warranty covers only devices mounted by the Manufacturer's certified installation experts.
4. Please pay careful attention to the correct installation of the device, which is crucial for ensuring both its proper operation and for the warranty obligations. Make sure that the installation expert fills in all necessary installation information on the Service Ticket.

6.4 Electric wiring

Before operation, the device must be connected to the electrical mains supply.

Power parameters: AC 230 V, 50 Hz, single-phase, with protective grounding. The power capability of the line must be at least 2 kW.

After connection to the mains supply, turn on the power switch on the right panel. The device then goes into standby mode (section 5.3.5).

7. MAINTENANCE

Maintenance of the device consists in scheduled replacement of filters in accordance with their natural wear.

The base filter is to be replaced yearly, provided that the surface of the base filter is regularly cleaned, as necessary. To clean the base filter, a household vacuum cleaner may be used. If regular base filter cleaning cannot be provided, it should be replaced once every 6 months, depending on the operating conditions.

Please note! Do not use any detergents for filter cleaning, do not wash or flush with water. Make sure not to damage the filtering surface when cleaning.

The high-efficiency E11 (H11) HEPA filter must be replaced at least once a year.

However, if the base filter F7 is cleaned and/or replaced on a correctly scheduled basis, the E11 (H11) HEPA filter may be replaced once every two years (depending on the operating conditions).

The AK and AK-XXL adsorption catalytic filters must be replaced at least once a year, depending on the operating conditions.

It is possible to manually adjust the schedule of filter replacement, programming the countdown timer to indicate the scheduled date (section 5.3.13): for example, a 30-day alert can be configured as a reminder to perform regular F7 filter cleaning.

7.1 Filter replacement

The filters should be replaced after their natural lifetime expires, or if the E11 (H11) HEPA filter is optionally replaced with an adsorption catalytic AK-XXL filter. To replace filters, do the following (Fig. 18):

1. Turn off the device using the switch button on the side panel and pull out the power cord from the socket.
2. Remove maintenance panel:
   • Press on the left and right latches towards each other, releasing the panel bottom corners;
   • Pull the panel, overcoming the force of the magnet lock located at the bottom of the maintenance panel.
3. Pull out the old filter and insert the new filter until it stops in position.
4. Reinstall the maintenance panel. Make sure the right and the left locks are clamped shut.
5. Please note! Avoid applying force on the latches during panel reinstallation, as this may damage the device.
6. Put the used filter into a bag and dispose of it.

No special measures for filter disposal are needed.

7.2 Troubleshooting

The LCD display will warn of any malfunctioning or contingency.

Should an abnormal situation occur:
• the device will automatically switch to standby mode;
• The LCD display will appear as shown in Figure 19 (error «EC05», blinking segments are circled).

Error indication ·········· EC ⟫⟫⟫ 05 ·········· Error code
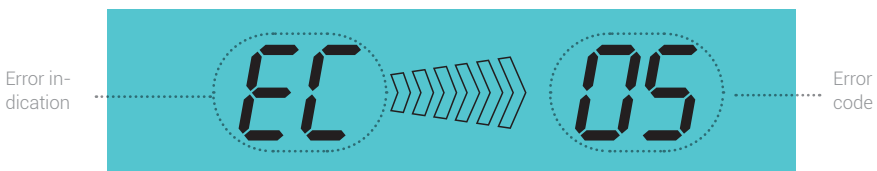
Figure 19 Example of error indication

If the «EC01» or «EC03» error message is displayed, make sure that the outdoor air temperature is within the range indicated in the technical parameters.

If the «EC02» error message is displayed, make sure that the outer air temperature is above the value preset by the «minimum admissible temperature» parameter (section 5.3.11).

If the outer air temperature conforms with the specified range, please contact the service center by phone, as indicated on the Warranty Card. If the temperature is beyond the permissible range, wait for the weather to warm up or cool down and then try turning the device on.

If the «EC04» error message appears: increase the target temperature (section 5.3.8). Should the indication persist, please contact the Service Center.

If the «EC11» indication appears: turn the device off, disconnect it (pull the power cord out of the socket) for several seconds and turn it on again. Should the indication persist, contact the Service Center.

If the «no rF» indication appears (interface unit fails to connect), turn the device off using the power switch on the side panel and then reengage it to reset the error message.

If any other error code is displayed, disconnect the device from power supply for several seconds and turn it on again. If the indication persists, please contact the Service Center.

Please note! If turning the device off and on (using the switch button on the right side panel) resets the user settings, contact the Service Center.

8. STORAGE, TRANSPORTATION, DISPOSAL

Prior to being installed for operation, the device should be stored and transported in the original packing. The device can be stored and warehoused in non-heated rooms at temperatures from −20°C to +40°C and with relative humidity up to 80% at +20°C.

If filters are stored separately from the device, the following guidelines should be observed:
- the filters must be stored in a dry room, protected from direct sunlight, at a distance at least 1 m from heating devices at temperatures not exceeding +30°C and with relative humidity not exceeding 80%;
- do not store filters in a room where chemicals emitting intense odor are stored.

Provided that these rules are carefully observed, the filter storage life is unlimited.

During transportation, ensure protection against shocks, falls and adverse climatic factors.

Upon expiration of the planned service life please discontinue the use of the device and contact the Service Center of the Vendor to get advice as to the possibility of further use of the device or its disposal.

9. WARRANTY

Tion Smart Microclimate JSC and Tion Company Group, as developers and manufacturers of the Tion O2 Breezer compact ventilation unit, congratulate you on your choice of this device and thank you for your purchase.

The planned service life of the Tion Smart Microclimate JSC device is 5 years, subject to the installation and operation guidelines.

Before placing the device into operation, please read carefully the User Manual, warranty terms and inspect the completeness of the packing list and appearance of the device.

Should any objections arise as to the incompleteness of the packing list and/or appearance of the device, please notify the Vendor at purchase.

If the package appears damaged during shipping please unpack the device and examine its intactness promptly. Shipping damage to the device must be recognized by the Carrier in written form to ensure proper processing of claims for damage reimbursement.

Warranty conditions
- The warranty is valid only if a duly filled-in warranty card, sales receipt, cash voucher or other document is presented, which certifies the purchase of the device and purchase date.
- If the purchase date cannot be ascertained, the warranty period starts from the device manufacture date in accordance with consumer protection legislation.
- The warranty terms cover manufacturing or design defects of the device. The warranty obligations include performing repair work either at a Service Center, or at the Purchaser's site (at discretion of the service office).
- The warranty does not cover scheduled maintenance with filter replacement, or any cases of device misuse violating the requirements of this User Manual.

The warranty service obligation is void in the following cases:
- if the warranty sticker on the device rear panel is not intact;
- if there is evidence of non-authorized installation, repair, dismantling, device alteration or treatment in non-authorized service centers;
- if the serial number of the device is not legible (wiped off, erased, corrected or destroyed);
- if the device was damaged by natural disasters (fire, inundations, etc.) or other causesbeyond the control of the Vendor (Manufacturer) and Purchaser;
- if the device bears mechanical damage (chipping, cracks, etc.) due to the application of excessive force, corrosive chemicals or elevated temperature or if any of these have caused device failure;
- if the failure is caused by incorrect connection to the power mains;
- if failure and/or damage is caused by foreign objects, liquids, insects or their products, etc., getting inside the device casing;
- if the device was not duly stored.

Dear Customers,

To claim the fulfillment of warranty obligations for the device please contact the device Vendor.

Tion Smart Microclimate JSC hereby confirms its obligations to satisfy the warranty conditions imposed by current legislation, in the case of detected device defects due to Manufacturer's fault. Tion Smart Microclimate JSC reserves the right to deny of warranty terms, should the aforementioned conditions not be duly fulfilled. The warranty period is 1 year from the purchase date, on condition that the operating instructions are duly followed.

tion.global

Service office e-mail : service@tion.global

ACCEPTANCE CERTIFICATE

Compact ventilation unit Tion O2 Breezer

Corresponds to Technical Specifications TU 3646-001-66248641-2015 and is acceptable for operation.

Manufacturing date _____

QC stamp

SALES CERTIFICATE

Version: Tion O2 MAC / Standard / MAC Base / Base / Lite (please underline)

Serial number (to be entered at purchase): _____

Vendor: _____

_____

_____

Sale date « ____ » _____ 20 __ y.

Vendor's signature and stamp _____ / _____

Version 1.6.2

WARNING! The "SALES CERTIFICATE" field must be duly filled in as a necessary confirmation of the warranty obligations

FOR NOTES

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